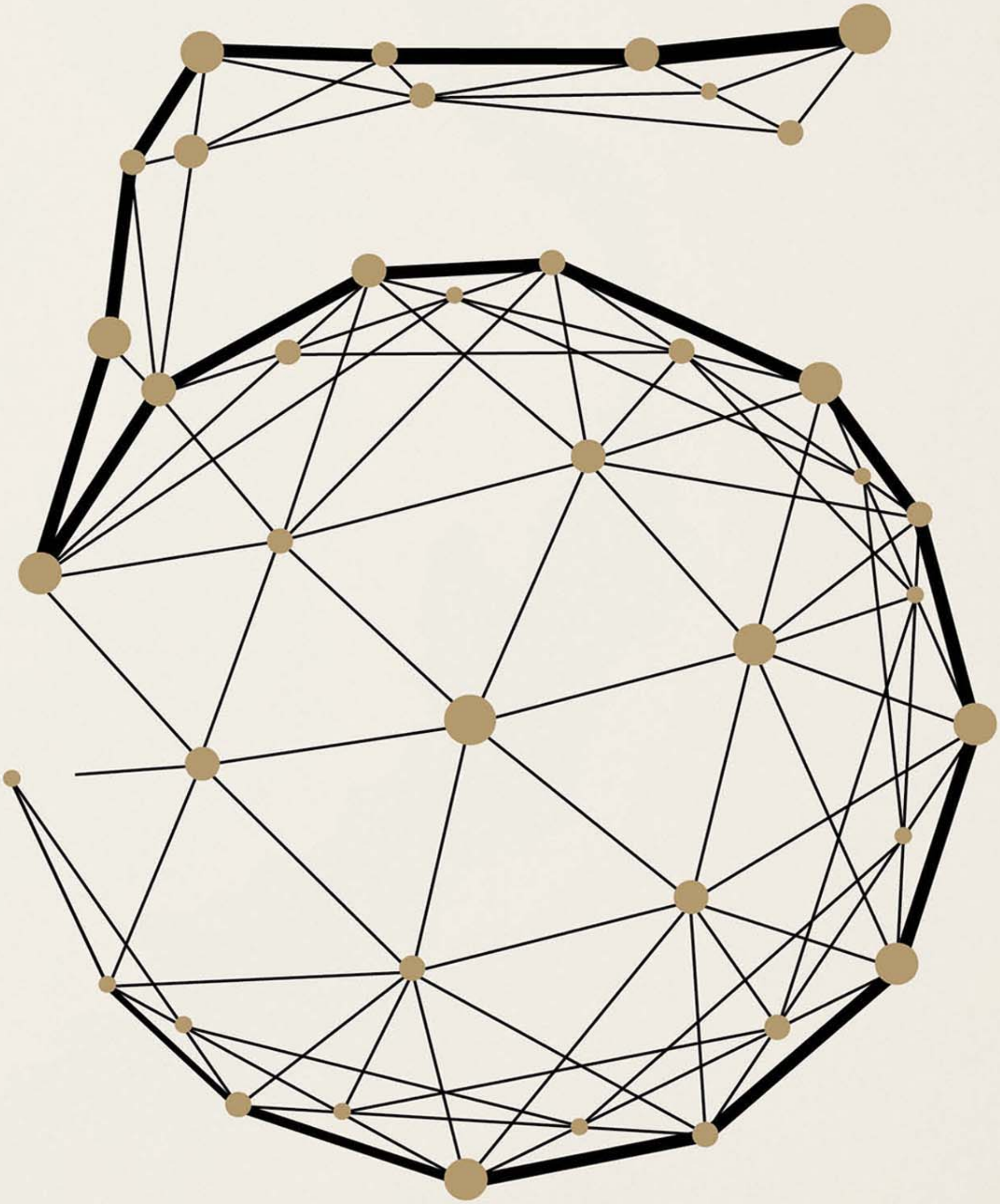
THE

Fifth

BEGINNING

What Six Million Years of Human History Can Tell Us About Our Future



第五次开始

600万年的人类历史如何预示我们的未来

[美] 罗伯特 · L. 凯利（Robert L. Kelly）著　徐坚　译

中信出版集团

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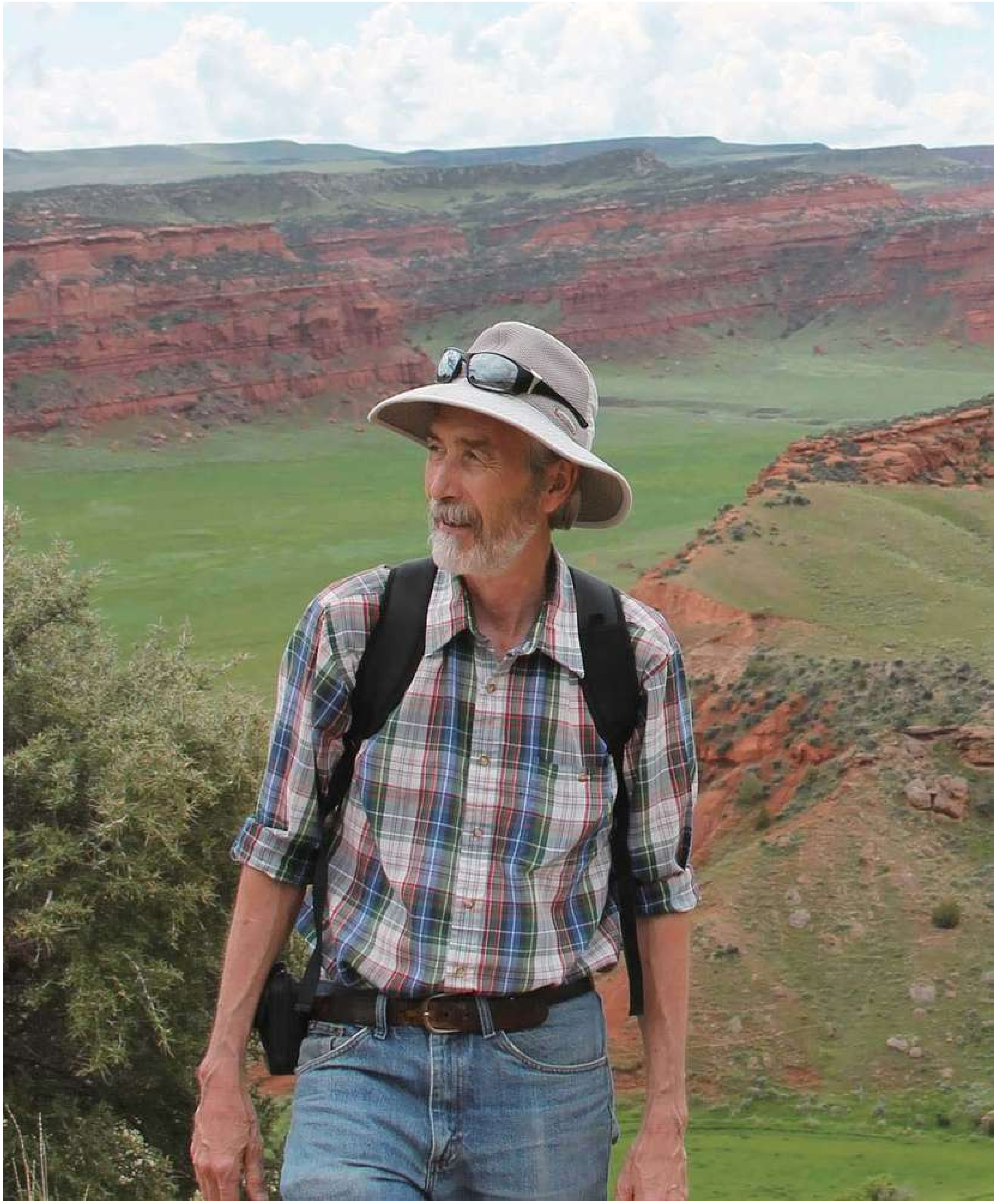
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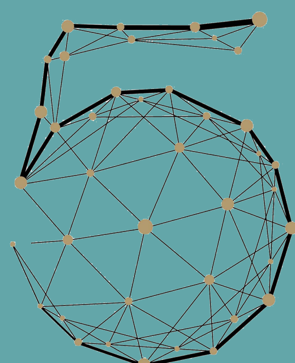
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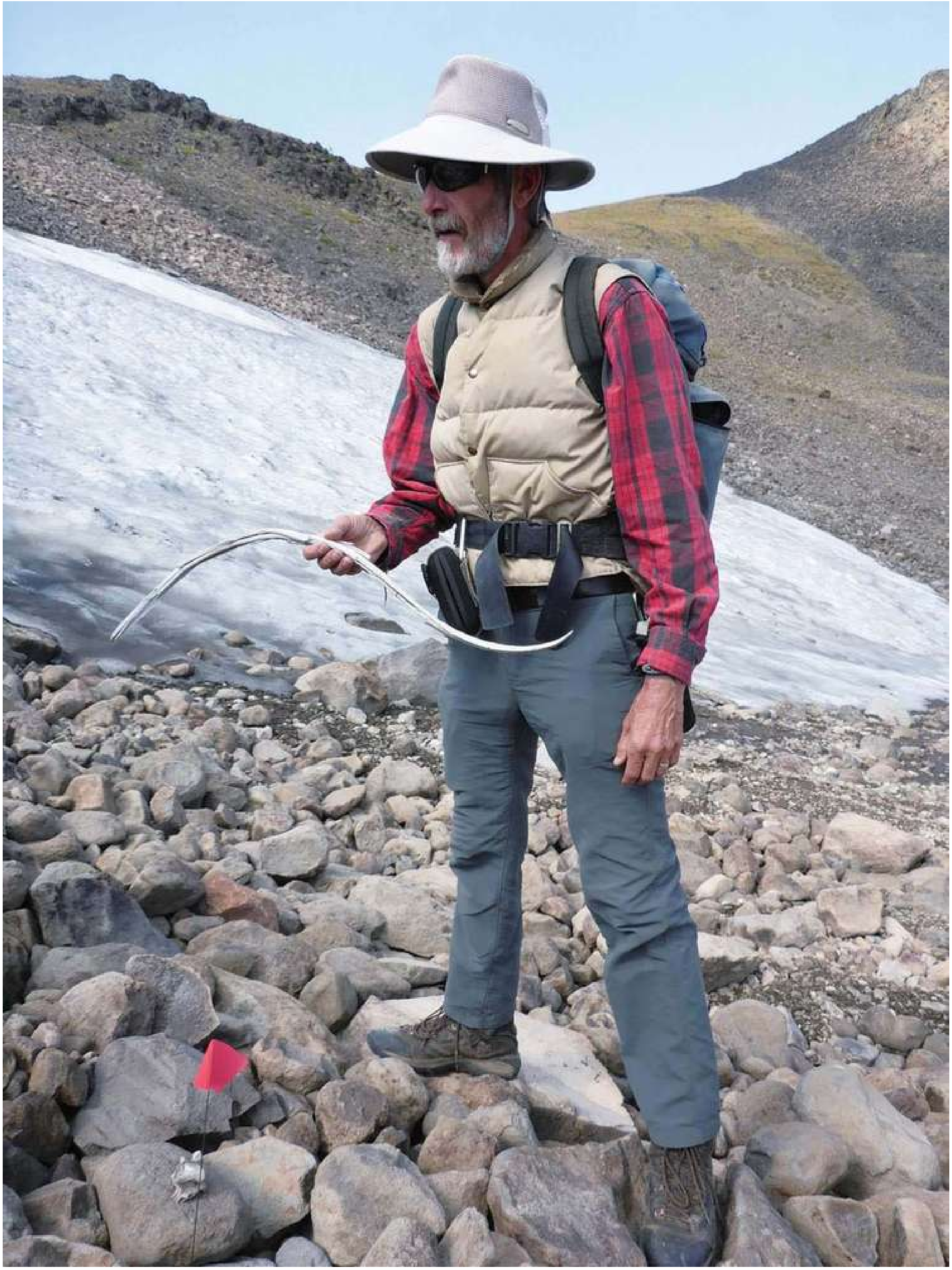
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[6] Diamond□2012□□Wilson□2002, 2012, 2014□.

[7] □□

[8] Kaplan□1996□.

[9] Hardoon, Ayele and Fuentes-Nieva□2016□.□□□□□□□□□□□□□□

[10] Gore□2013□; Kissinger□2014□; Kaplan□1996□.

[11] Kolbert□2014□; Klein□2015□; Vince□2014□; Weisman□2014□; Oreskes and Conway□2014□;Steffen, Broadgate, et al.□2015□; Steffen, Richardson, et al.□2015□.

[12] Weisman□2014□.

[13] Wright□2000□; Ridley□2010□; Pinker□2012□; Kenny□2012□; Goldstein□2012□; Deaton□2013□; Ackerman□2014□. □□□□Human Security Report Project□2011□□

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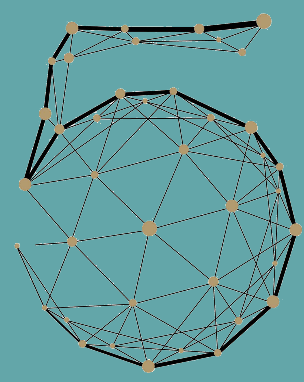
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[4] Rathje and Murphy[illegible]2001[illegible].



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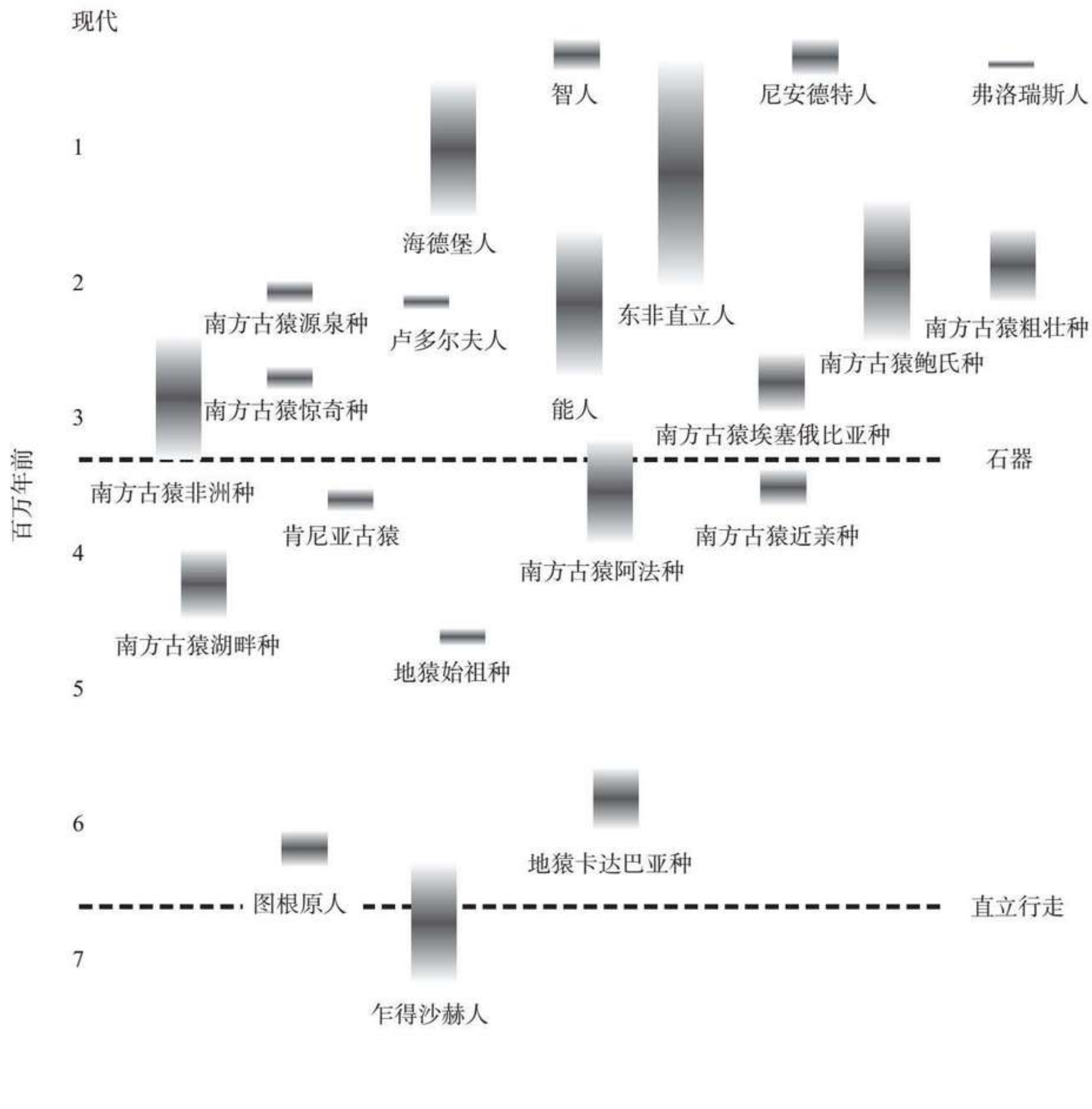
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能人
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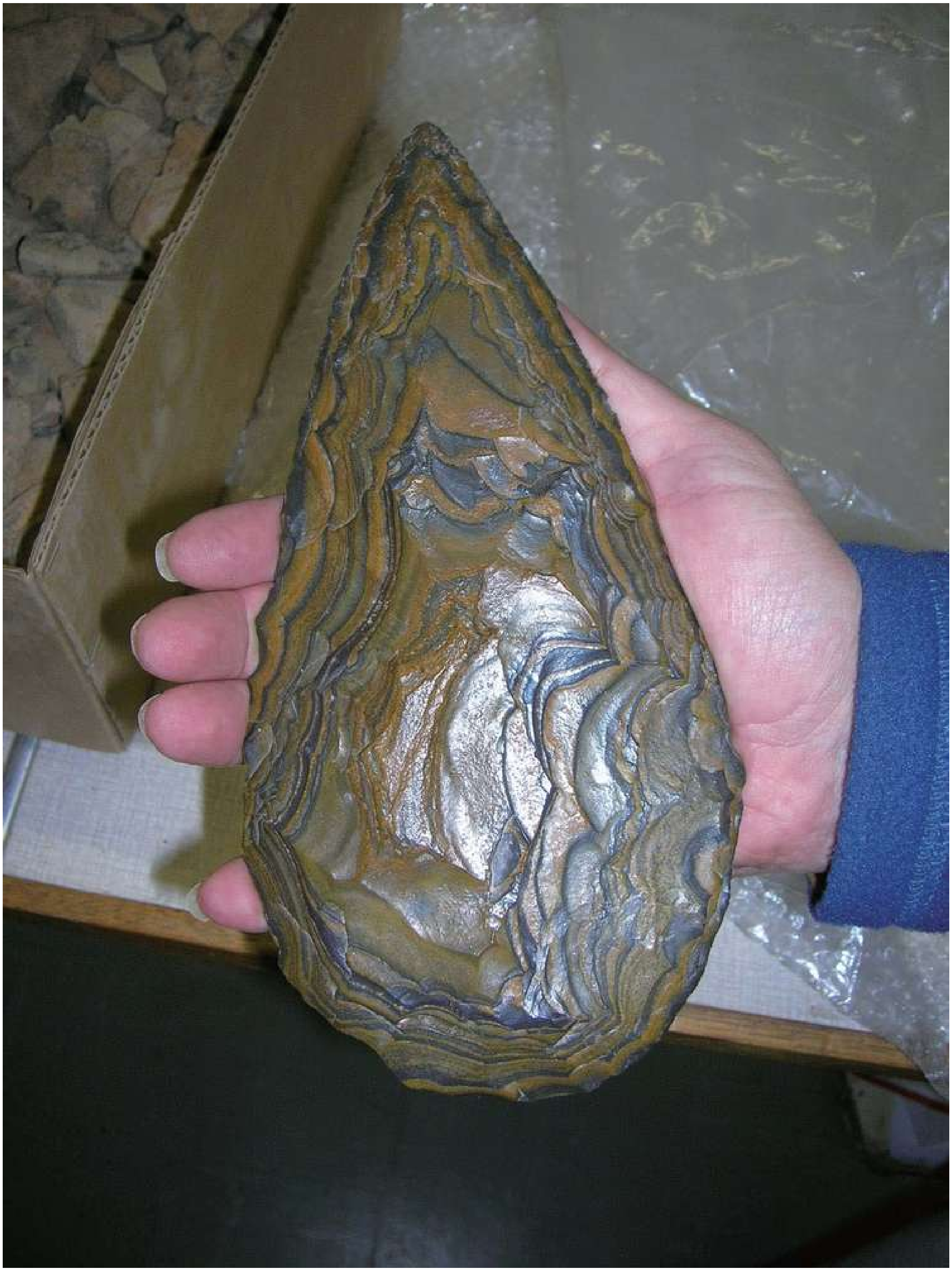
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[4] Napier（1970）.

[5] [illegible]“[illegible]”[illegible]Rodham and McHerry（1980）[illegible]Vaugham（2003）[illegible]Owen Lovejoy（1988）[illegible]Lovejoy[illegible]

[illegible]

[6] Toth and Schick（2009）.

[7] Thieme（1997）.[illegible]30[illegible]

[8] Moura and Lee 2004

[9] H. habilis H. rudolfensis A. garhi “ ” 200 400

[10] Ungar 2004 2012 . 200 Ferrato wt al. 2013

[11] Walker and Leakey 1993 11 Homo ergaster 67 [1]

[12] Wrangham 2009 ; Gowlett and Wrangham 2013 ; Zink and Lieberman 2016 .

[13] Aiello and Wheeler 1995 .

[14] Berna et al. 2011 “ ” 40

[15] Ferring et al. 2011 .

[16] Homo ergaster Homo erectus

[illegible]
Lordkipanidze et al.[illegible]2013[illegible]

[17] [illegible]

[18] Lee[illegible]1980[illegible].

[illegible]4[illegible]

[illegible]

[illegible]

——L. P.[illegible]（L. P. Hartley）

[illegible]（*The Go-Between*）

[illegible]“[illegible]”[illegible]“[illegible]”[illegible]

[illegible]20[illegible]5[illegible]

[illegible]40[illegible]“[illegible]”[illegible][1][illegible]20[illegible]——[illegible]

[illegible]100[illegible]20[illegible]

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[illegible]

[illegible]

[illegible]

[illegible]

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[illegible]·[illegible]Steven Mithen[illegible][2][illegible]

[illegible]“[illegible]”[illegible]1[illegible]2[illegible]3[illegible]4[illegible]

[illegible]“[illegible]”[illegible]860[illegible]7 000[illegible]70[illegible]230[illegible]

[illegible]“[illegible]”[illegible]

[illegible]

[illegible]

[illegible]

[illegible]Indexical Learning[illegible]·[illegible]Leslie White[illegible]

[illegible]——[illegible]

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[illegible]“[illegible]……”[illegible]

1.[illegible]……

2.[illegible]……

3.[illegible]……

4.[illegible]……

5.[illegible]……

[illegible]——[illegible][3][illegible]

[illegible]“[illegible]”[illegible]

[illegible]

[illegible]·[illegible]Robin Dunbar[illegible][4][illegible]10[illegible]

[illegible]“[illegible]”[illegible]

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12 12

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[5]

[6]

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[illegible]170[illegible]

[illegible]·[illegible]Lawrence Barham[illegible][7][illegible]1[illegible]2[illegible]3[illegible]4[illegible]50[illegible]

[illegible]FOXP2[illegible]$FOXP_2$[illegible]80[illegible]

[illegible]dog[illegible]chien[illegible]koira[illegible]alika[illegible]“[illegible]”[illegible]

[illegible]Washoe[illegible]350[illegible]

[illegible]“[illegible]”[illegible]“[illegible]”[illegible]

[illegible]

[illegible]20[illegible]

[illegible]

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20[illegible]50[illegible]Mistassini Cree[illegible]·[illegible]Eleanor Leacock[illegible]“[illegible]‘[illegible]——[illegible]’[illegible]”[8][illegible]

[illegible]—[illegible]—[illegible]

[illegible]·[illegible]（Nancy Howell）[illegible]“[illegible]……[illegible]‘[illegible]’”[9][illegible]

[illegible]—[illegible]（Gunwinggu）[illegible][10]。

[illegible]——[illegible]“[illegible]”（tolerated theft）[illegible]—[illegible]

[illegible]

[illegible]“[illegible]”[illegible]“[illegible]”[illegible]

[illegible]·[illegible]（Mary Stiner）[illegible][11][illegible]70[illegible]40[illegible]

[illegible]Qesem Cave[illegible]

[illegible]——[illegible]——[illegible]

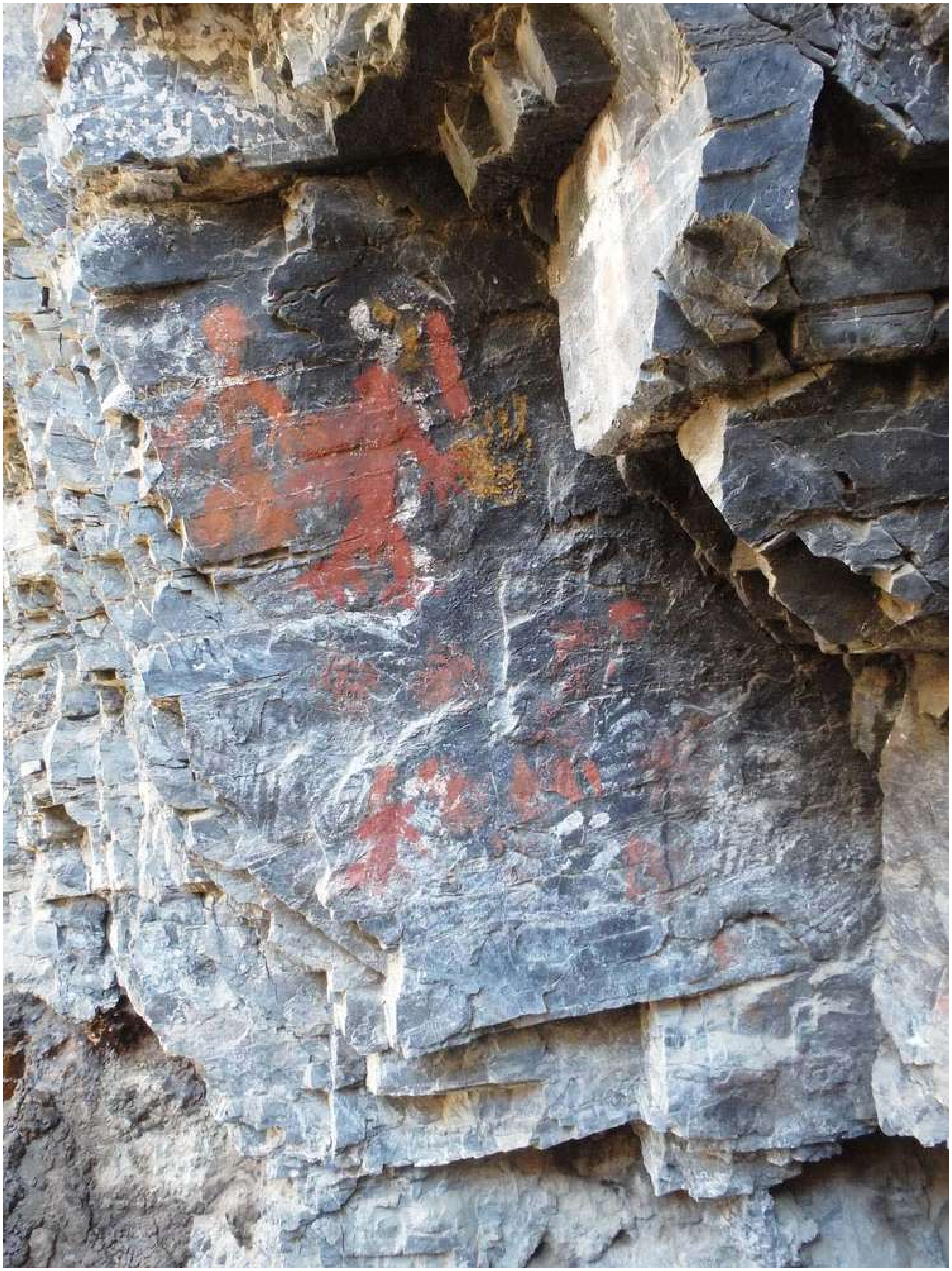
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[illegible]Duke Ellington[illegible]·[illegible]Bob Dylan[illegible]·[illegible]O’Keefe[illegible]“[illegible]”[illegible]“[illegible]”[illegible]



[illegible]4-1 [illegible]—
[illegible]32 000[illegible]
[illegible]Robert Kelly[illegible]

[illegible]“[illegible]”[illegible]·[illegible]Norman Rockwell[illegible]20[illegible]·[illegible]Pete Seeger[illegible][12][illegible]“[illegible]”[illegible]Pussy Riot[illegible]

[illegible]

[illegible]20[illegible]“[illegible]”[illegible]“[illegible]”[illegible]

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[illegible][14][illegible]8[illegible]7.5[illegible]10[illegible][15][illegible]

[illegible]“[illegible]”[illegible]

[illegible]Baldwin effect[illegible][16][illegible]——[illegible]“[illegible]”[illegible]

[illegible]12[illegible]5[illegible]——[illegible]……[illegible]

20[illegible]8[illegible]6.5[illegible]5[illegible]

[illegible]7.4[illegible]“[illegible]”[illegible][17][illegible]

[illegible]7[illegible][18][illegible]“[illegible]”[illegible]

[illegible]——[illegible]4[illegible]

[illegible]4[illegible]

[illegible]·[illegible]——[illegible]David Lewis-Williams[illegible][19][illegible]



[illegible]4[illegible]

[illegible]“[illegible]”[illegible]

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[illegible][20][illegible]

[illegible]“[illegible]”[illegible]“[illegible]”[illegible]

[illegible]“[illegible]”[illegible]

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[illegible]4-3 [illegible]

[illegible]Robert Kelly[illegible]

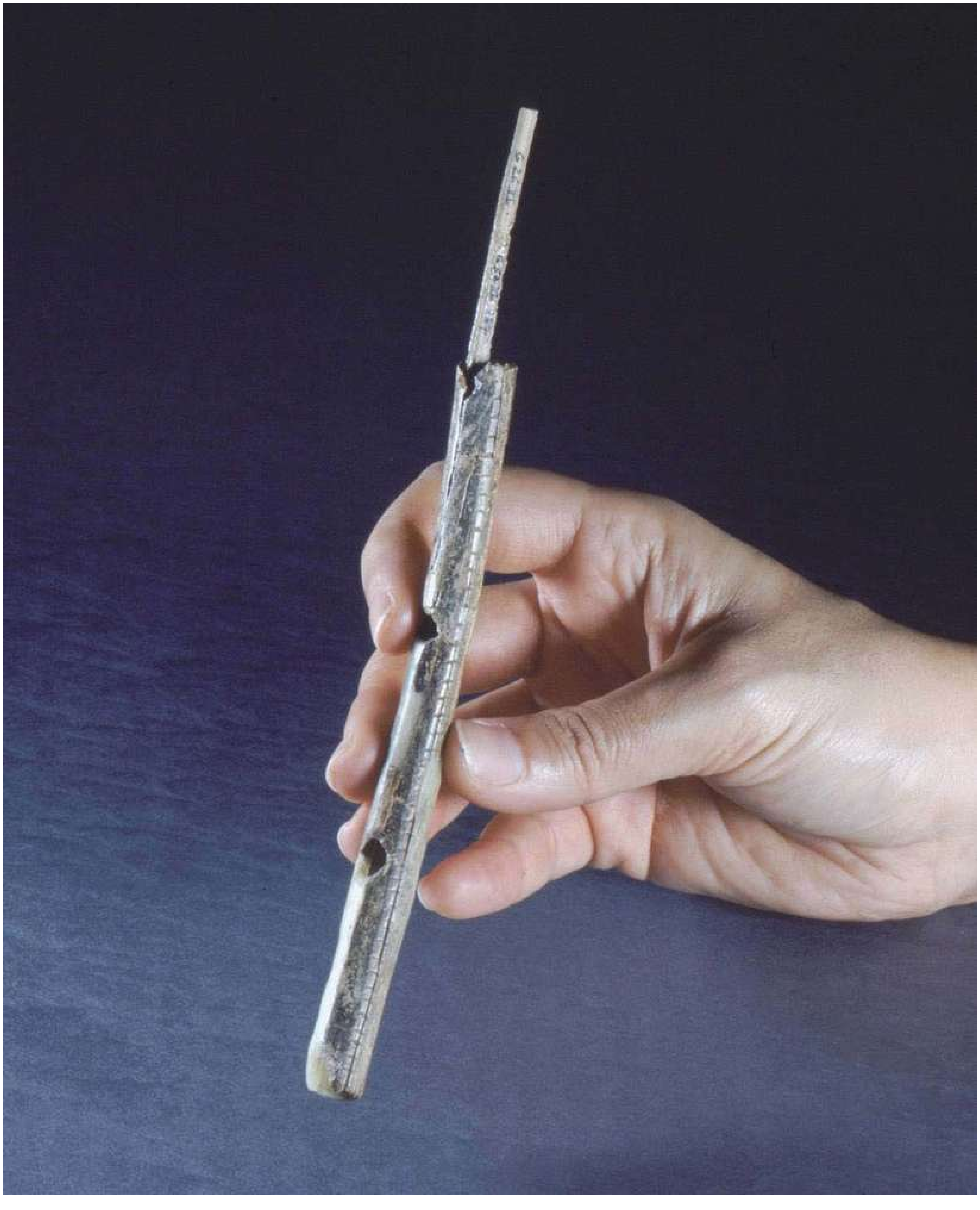
[illegible]——[illegible]——[illegible]

[illegible]——[illegible][21][illegible]“[illegible]”[illegible]

[illegible][22][illegible]Shanidar Cave[illegible]

[illegible]5[illegible]4[illegible]5[illegible]

[illegible]20[illegible]5[illegible]



[illegible]4-4 [illegible]42 000[illegible]Hilde Jensen[illegible]

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[illegible]·[illegible]Eric Smith[illegible]

[illegible][23][illegible]
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[illegible][24][illegible]

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[illegible]4-5 [illegible]37 000[illegible]Hilde Jensen[illegible]

[illegible]



图4-6 □□□□□□□□□□□□□□□32 000□□□Juraj Lipták□□□□□□□□□□

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[2] Mithen□1996□.

[3] □□Kaminski□2014□□□□□□□□□□□□□□□□□□□□□□□□□□□□□
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[4] Dunbar□2003□.

[5] □□□□□□Broca’s area□□□□□□□□□□□□□□□□□□□□□□□□□□□□
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[6] Steele, Ferrari and Fogassi □ 2012 □ ; Sout and Chaminade□2012□.

[7] Barham□2013□;Ambrose□2010□; Wadley□2013□.

[8] Leacock□1969□.

[9] Howell□2010□.□□□□□□□□□□□□□□□□□□□□□□□□□□□□□“□□
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[10] Altman□1987□.

[11] Stiner, Gopher and Barkai□2011□; Stiner□2013□.

[12] □□·□□□Pete Seeger□1919—2014□□□□□□□□□□□□□□□□
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[13] Henshilwood, d’Errico and Watts□2009□.

[14] Texier et al□2010□.

[15] □□Stiner□2014□□□□□□□□□□□□□□□□□“□□”□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□19□□□□□50□□□□□□□□□□□□□□□Joordens et al.□2015□□

[16] □□□□□Baldwin effect□□□·□□□1896□□□□□□□□□□□□——□□

[17] Ambrose□2003□.

[18] Harpending and Rogers □ 2000 □ ; Li and Durbin □2011□.□□□□□□□□□□□□□□

[19] Lewis-Williams□2002□.

[20] Dennett □ 2006 □ □Boyer □ 2001 □ □Boyer and Bergstrom□2008□□Atran□2002□□Dawkins□2006□.□□□

[21] Pettitt□2013□.

[22] Gargett et al□1989□□Sommer□1999□.□□□□□□□□□□□□Zihao□2015□□

[23] Smith[illegible]2004[illegible].

[24] Wiessner[illegible]2002[illegible].

[25] [illegible]·[illegible]1882—1967[illegible]24[illegible]——[illegible]

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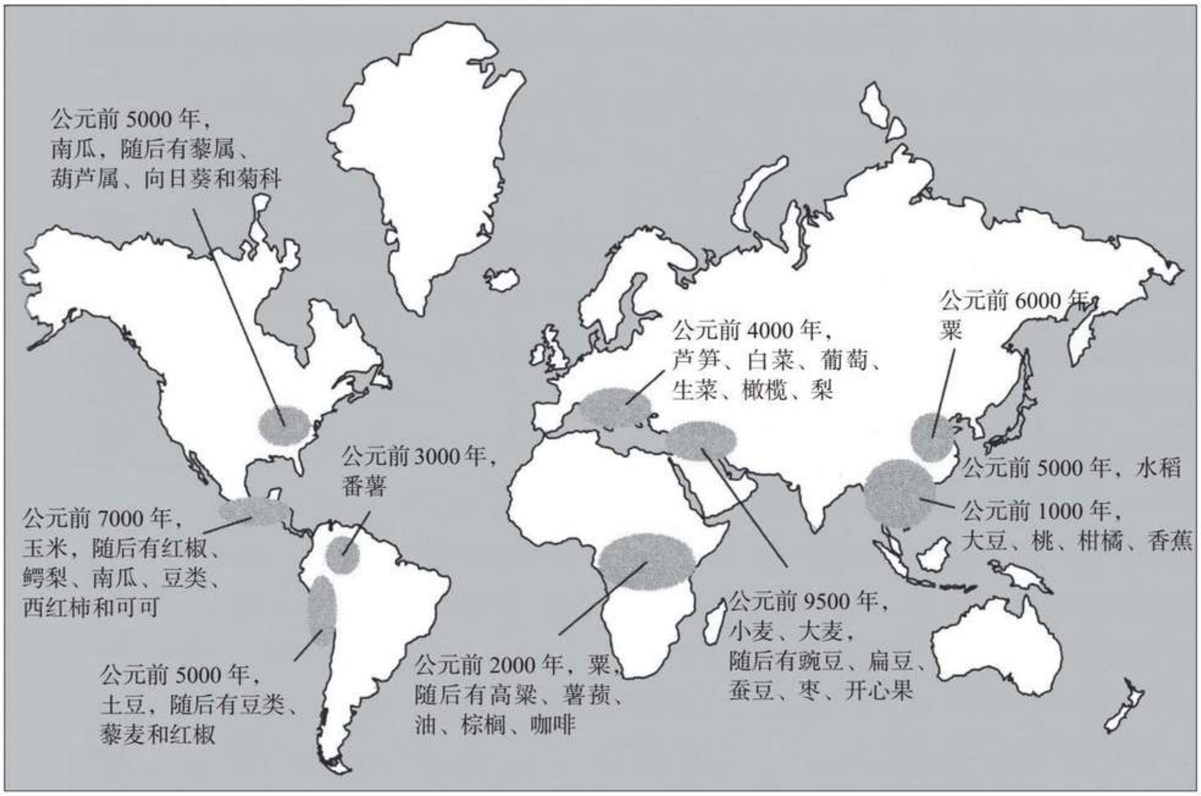
[illegible]

——[illegible]·L.[illegible]（Henri L. Bergson）

[illegible]6[illegible]5[illegible]1[illegible]

[illegible]1.3[illegible]3.3[illegible]—[illegible][1][illegible]1[illegible][2][illegible]——[illegible]

[illegible]——[illegible]——[illegible]5-1[illegible]


公元前 5000 年，
南瓜，随后有藜属、
葫芦属、向日葵和菊科
公元前 7000 年，
玉米，随后有红椒、
鳄梨、南瓜、豆类、
西红柿和可可
公元前 3000 年，
番薯
公元前 5000 年，
土豆，随后有豆类、
藜麦和红椒
公元前 4000 年，
芦笋、白菜、葡萄、
生菜、橄榄、梨
公元前 2000 年，粟，
随后有高粱、薯蓣、
油、棕榈、咖啡
公元前 9500 年，
小麦、大麦，
随后有豌豆、扁豆、
蚕豆、枣、开心果
公元前 6000 年，
粟
公元前 5000 年，水稻
公元前 1000 年，
大豆、桃、柑橘、香蕉

[illegible]5-1 [illegible]



[illegible]5-2 [illegible]7700—[illegible]5700[illegible]

[illegible]James Ahern[illegible]

[illegible]—[illegible]75[illegible]10[illegible]7.38[illegible]7.11[illegible]3.75[illegible]1.43[illegible]0.25[illegible]0.24[illegible]0.17[illegible][3][illegible]

[illegible]Vere Gordon Childe[illegible]

[illegible]1892[illegible]

[illegible]

1947[illegible]1957[illegible]

[illegible][4][illegible]

[illegible][5][illegible]

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[illegible]18[illegible]

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[illegible]7[illegible]1856[illegible][6][illegible]

[illegible]5 000[illegible]4[illegible]1%[illegible]3%[illegible]Denisovan,[illegible][7][illegible]



[illegible]5-3 [illegible]825—1125[illegible]

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[illegible]5[illegible]3[illegible]18 000[illegible]

[illegible]13000[illegible][8][illegible]11000[illegible]

[illegible]5[illegible]

[illegible]10000[illegible]—[illegible][9][illegible]

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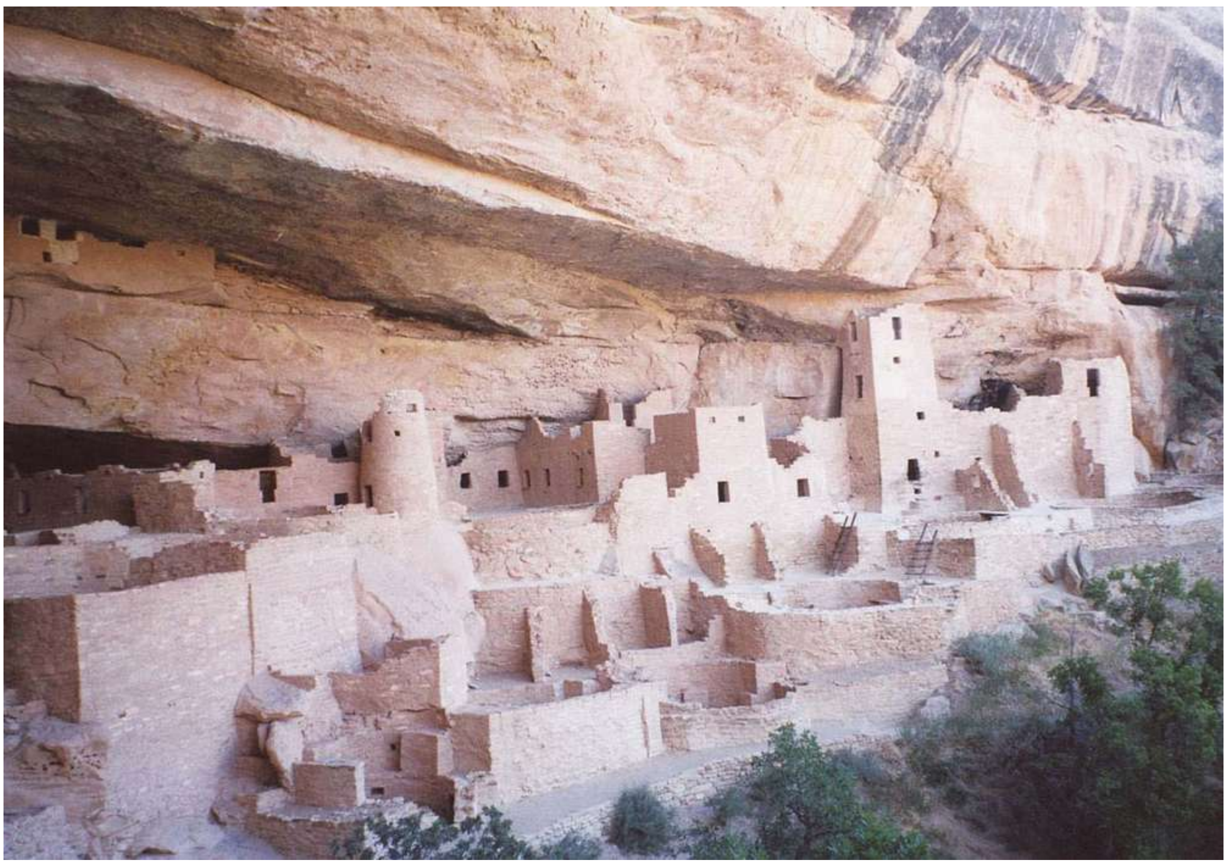
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[illegible]·[illegible]Steven Simms[illegible][10][illegible]

[illegible]7[illegible]41[illegible]96[illegible]2.74[illegible]2.74[illegible]×96[illegible]/41[illegible]= 6.41[illegible]/[illegible]385[illegible]/[illegible]100[illegible]/[illegible]/[illegible]

[illegible] — [illegible] Ache [illegible] Hadza [illegible] — [illegible]



[illegible]5-4 [illegible]1200—1260[illegible] Brigid Grund[illegible]

[illegible]——[illegible]——[illegible]70[illegible]

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[illegible]16[illegible]

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[15] Zahid, Robinson, and Kelly（2016）. [illegible]Kelly et al.（2013）[illegible]

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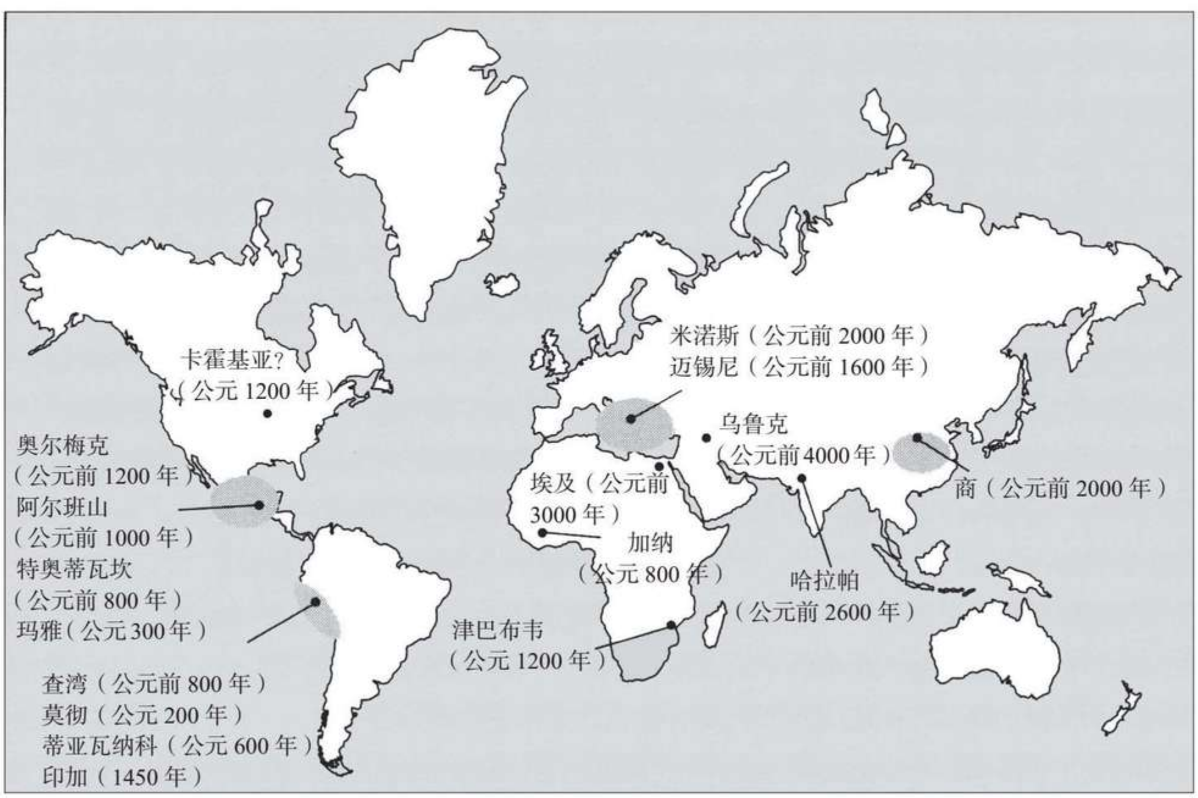
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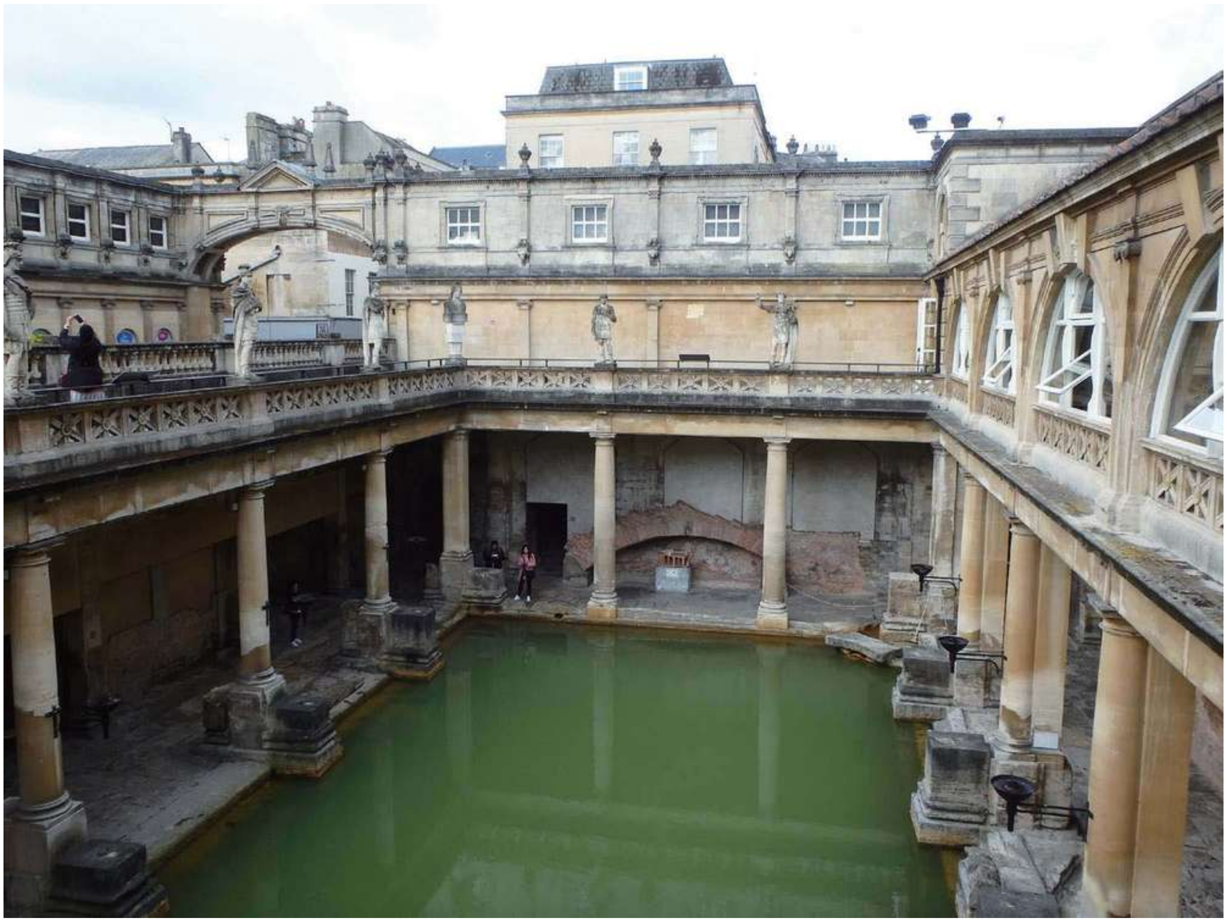
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[illegible]Robert Kelly[illegible]



[illegible]6-13 [illegible]4[illegible]

[illegible]Robert Kelly[illegible]



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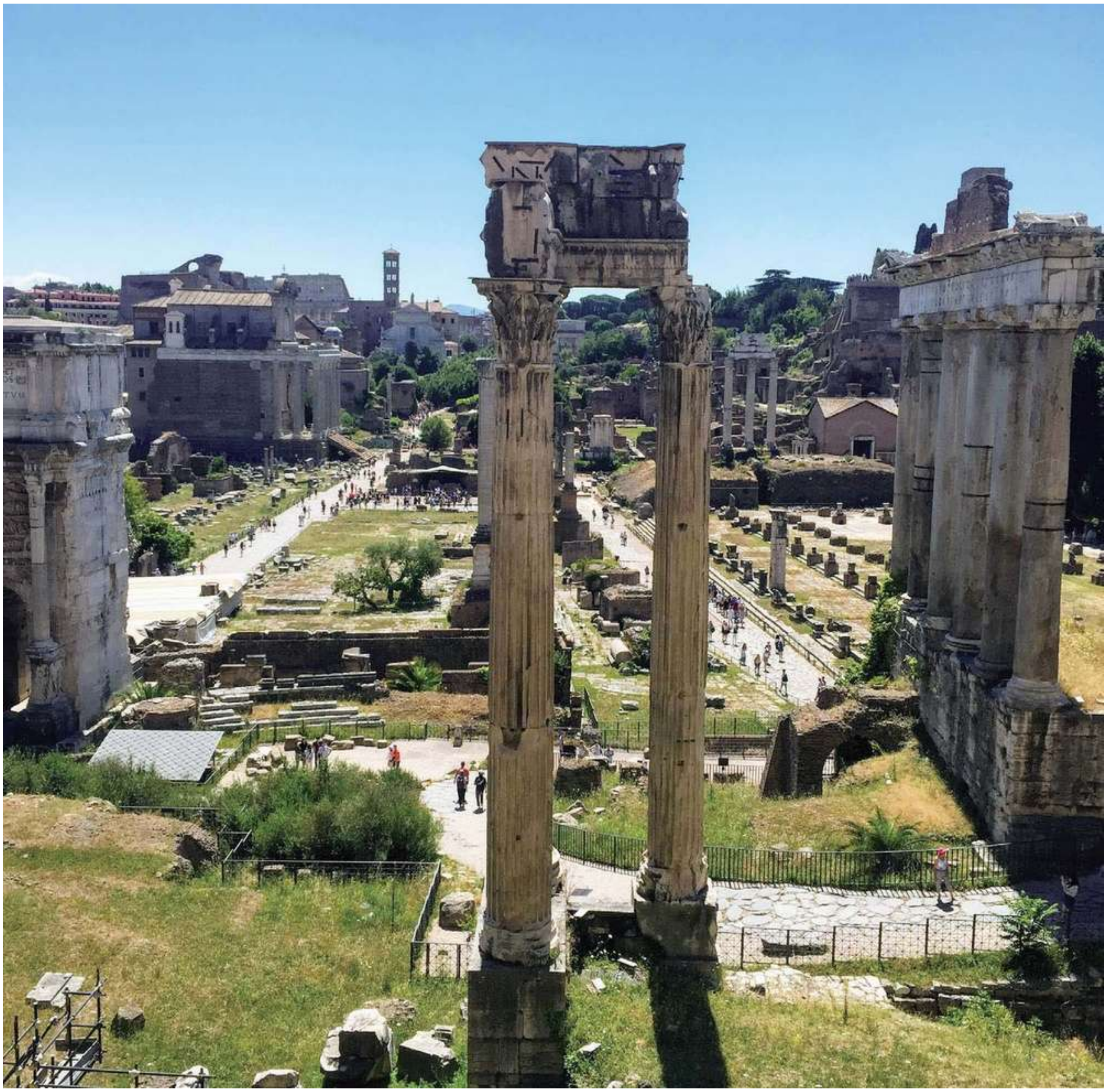


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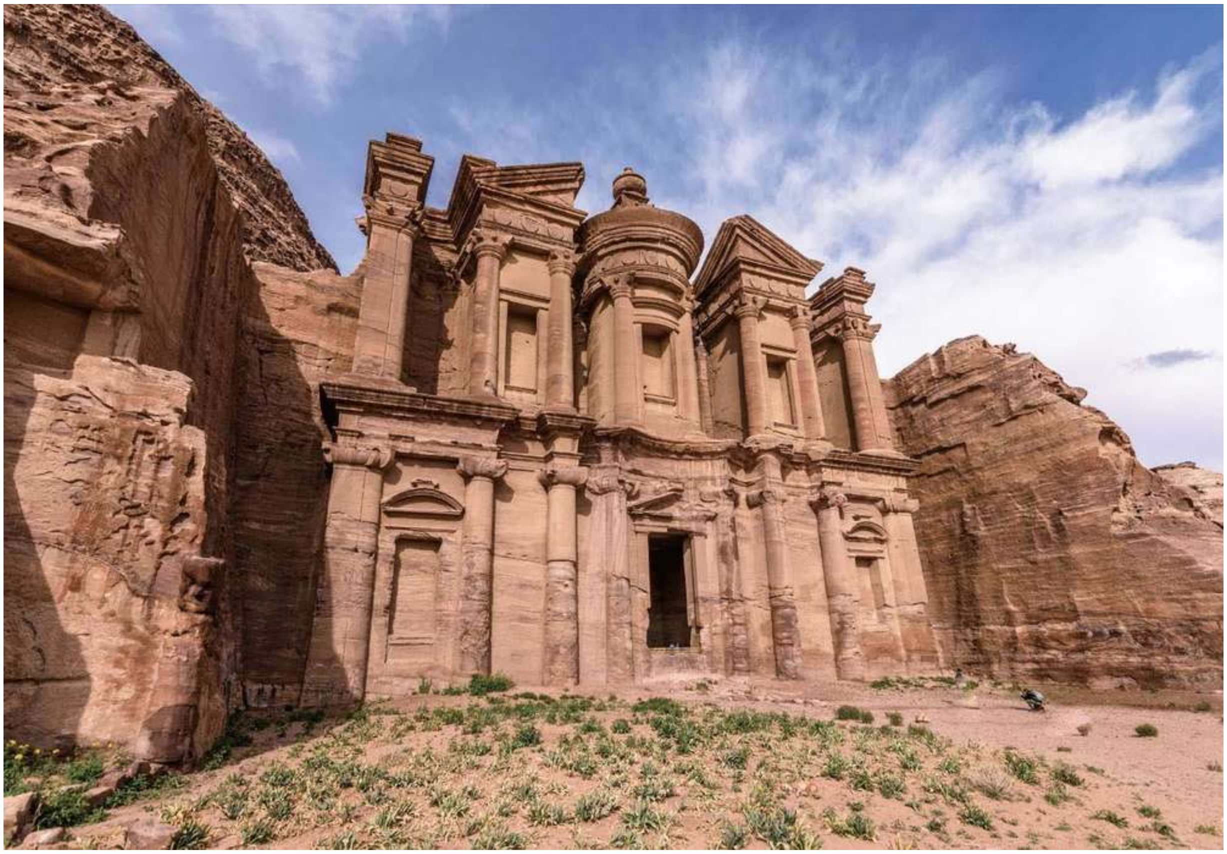
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[illegible]6-17 [illegible]72—80[illegible]

[illegible]

[illegible]Rachel Lau McDonald[illegible]



[illegible]6-18 [illegible]



[illegible]6-19 [illegible]



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20[illegible]80[illegible]“[illegible]”[illegible]“[illegible]”[illegible]5700[illegible]·[illegible]·[illegible]Joyce Marcus[illegible]·[illegible]Kent Flannery[illegible][22][illegible]

[illegible]0.9[illegible]0.65[illegible]0.45[illegible]2/3[illegible]

[illegible]—[illegible]

[illegible]—[illegible]“[illegible]”[illegible]—[illegible]“[illegible]”[illegible]“[illegible]”[illegible]

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[1] Fagan[illegible]1975[illegible].

[2] [illegible]1815[illegible]·[illegible]·[illegible]Giovanni Battista Belzoni[illegible]Ozymandias[illegible]——[illegible]Sekhmet[illegible]

[3] Roscoe（2009）.

[4] Lehner（1997）.□□□□□□□□□□44°□□□□□□□□□□□□□□□□□□□□□□□□□□□52°□□□□□□□□□□□□□□□□□□□

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[7] □□□40□□□□□

[8] Briggs（1970）.

[9] Fry（2007）.

[10] Ames and Maschner（1999）.

[11] Kelly（2013a；2013b）.□□□□□□□□□□□□□□□□□□□□□□□□□

[12] □□

[13] Wendorf□1968□.□□□□□□□□□□□□□□□□8000□□□□□□□□□
□Nataruk□□□□□□Mirazon Lahr et al□2016□□

[14] Haas and Piscitelli□2013□.

[15] Ferguson□2013□.

[16] □□Allen and Jones□2014□□

[17] □□□□□□□□Lee□1979□246□□□□□□□□□□Codere□1950□
120□□

[18] □□□□□20□□70□□□□□□□□□□□□□□□□□□□□□□□15□□□10□□
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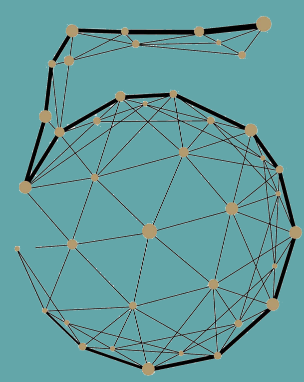
[19] Ember and Ember□1992□; Ember, Adem and Skoggard□2013□.

[20] Keith□2004□□□□□□□□□□□□□□□□□□□□□

[21] Atran□2010□.

[22] Flannery and Marcus□2012□.

[23] □□
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[illegible]7[illegible]

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[illegible]“[illegible]”[illegible]

[illegible]Tuna el-Gebel[illegible]

[illegible]Petosiris[illegible]——[illegible]

[illegible]“[illegible]”[illegible]“[illegible]”

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[illegible]15 000[illegible]

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[illegible]600[illegible]

[illegible]21[illegible]500[illegible]

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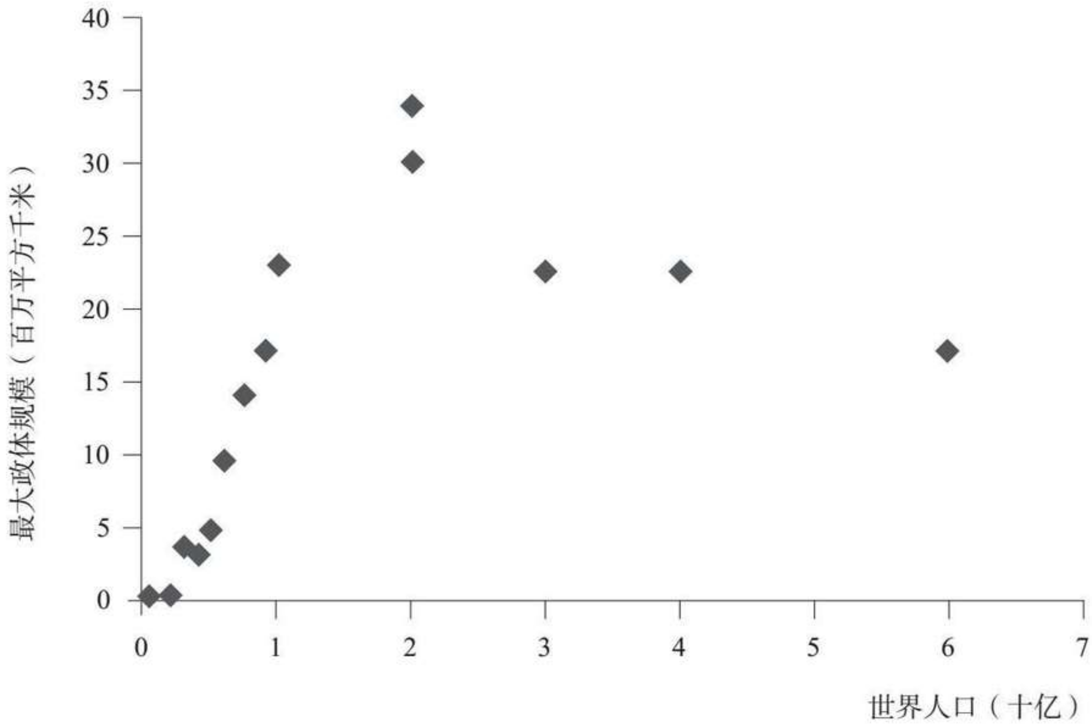
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[illegible]vs[illegible]*Jihad versus Mcworld*[illegible]·[illegible]Benjamin Barber[illegible][28][illegible]“[illegible]”[illegible]“[illegible]”[illegible]“[illegible]”[illegible]“[illegible]”[illegible][29][illegible]1[illegible][30]

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[illegible]”[illegible]1901[illegible]
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[illegible]·[illegible]“[illegible]350[illegible]……[illegible]”[illegible]“[illegible]……[illegible]”[33][illegible]

[illegible]·[illegible]Parag Khanna[illegible][34][illegible]“[illegible]”[illegible]“[illegible]”[illegible]“[illegible]”[illegible]

[illegible]

[illegible]—[illegible]2014[illegible]“[illegible]”[illegible]

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[illegible]“[illegible]”[35]

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[illegible]“[illegible]”[illegible]2015[illegible]·[illegible]Lisa Murkowski[illegible]“[illegible]”[36][illegible]

[illegible]“[illegible]”[illegible]H. V. [illegible]H.V. Evatt[illegible]“[illegible]”[37][illegible]—[illegible]

[illegible]1648[illegible]350[illegible]

[illegible]“[illegible]”[illegible]

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[illegible][38][illegible]，[illegible][39][illegible]。

[illegible]—[illegible]——[illegible]2015[illegible]。

[illegible]*The Parliament of Man*[illegible]·[illegible]Paul Kennedy[illegible]*Winning the War on War*[illegible]·[illegible]Joshua Goldstein[illegible][40]。

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[illegible]“[illegible]”[illegible]“[illegible]”[illegible][41][illegible]。

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[illegible]5000[illegible]

[illegible]·[illegible]·[illegible]·[illegible]·[illegible]Albert Schweitzer[illegible]2004[illegible]“[illegible]”[illegible]300[illegible]


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[illegible]7-5 [illegible]

[illegible]Robert Kelly[illegible]

[illegible]·[illegible]“[illegible]”[42][illegible]

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[illegible]7-6 [illegible]2017[illegible]

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[illegible]21[illegible]“[illegible]”

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[illegible]—[illegible]1920[illegible]*Fire and Ice*[illegible]·[illegible]Robert Frost[illegible]

[illegible]“[illegible]”[illegible]

[illegible]

[1] [illegible]1858[illegible]

[2] [illegible]·[illegible]Paul Crutzen[illegible]“[illegible]”[illegible]Catastrophozoic[illegible]

[3] Steffen, Broadgate, et al.[illegible]2015[illegible]; Steffen, Richardson, et al.[illegible]2015[illegible].

[4] [illegible]20[illegible]50[illegible]20[illegible]80[illegible]

[5] [illegible]19[illegible]15[illegible]40%[illegible]50%——[illegible]—[illegible]——[illegible]“[illegible]”[illegible]

[6] [illegible]50%[illegible]

[7] Roser[illegible]2015[illegible].

[8] [illegible]·[illegible]Yogi Berra[illegible]·[illegible]Casey Stengel[illegible]·[illegible]·[illegible]Niels Bohr[illegible]

[9] [illegible]·[illegible]1971[illegible]·[illegible]Dennis Gabor[illegible]1963[illegible]“[illegible]”[illegible]

[10] [illegible]Ackerman[illegible]2014: 181[illegible]

[11] [illegible]

[12] Micklethwait and Wooldridge[illegible]2014[illegible]Waltz[illegible]1954[illegible]Peregrin, Ember and Ember[illegible]2004[illegible]Carneiro[illegible]2004[illegible]Graber[illegible]2004[illegible]Roscoe[illegible]2004[illegible]Taagepera[illegible]1978[illegible]

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[14] [illegible]19[illegible]

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[17] [illegible]1995[illegible]Zenith[illegible]2012[illegible]Element Electronics[illegible]

[18] Friedman[illegible]2005[illegible].

[19] “[illegible]”[illegible]2015[illegible]

[20] 1944[illegible]P-51[illegible]51 000[illegible]——[illegible]

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[22] [illegible]“9·11”[illegible]50%[illegible]13.5%[illegible]

[23] Fallows[illegible]2015[illegible].

[24] Keegan [illegible] 1993: 59 [illegible]; Goldstein [illegible] 2012 [illegible]; Human Security Report Project[illegible]2011[illegible].

[25] [illegible]49[illegible]“[illegible]”[illegible]“[illegible]”[illegible]“[illegible]”[illegible]——[illegible]

[26] [illegible]

[27] Armstrong[illegible]2014[illegible].

[28] Barber[illegible]1996[illegible].

[29] [illegible]“[illegible]”[illegible]“[illegible]”[illegible]

[30] [illegible]Lyons[illegible]2015[illegible]

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[33] Cartwright□2008: 49□.□□“□□□□□”□□□□□□□□□□□□□□

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[34] Khanna□2011□□Davidson and Rees-Mogg□1997□□□

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[35] Khanna□2013: SR 5□.

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[39] Hsiang et al□□2011, 2013□.

[40] Kennedy□2006□; Goldstein□2012□.

[41] Ewing□2007: 35□□□□□2004□□□□□□□□□□□□□□□□“□□□

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